Amendments to the Claims:

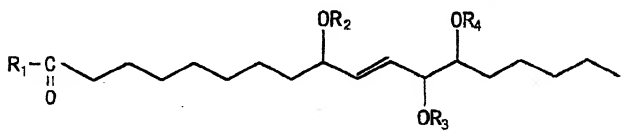
This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A pharmaceutical composition comprising a purified or synthesized hydroxy unsaturated fatty acid as an active ingredient and a pharmaceutically acceptable carrier, wherein the hydroxy unsaturated fatty acid is an unsaturated fatty acid with 18 carbon atoms and the unsaturated fatty acid may be substituted at its hydroxyl group or a carbonyl group of a carboxylate moiety, and wherein the purity of the hydroxy unsaturated fatty acid is 95% or higher.

2. (Previously Presented) The pharmaceutical composition of claim 1, wherein the unsaturated fatty acid with 18 carbon atoms has a trihydroxy-monoene structure.

3. (Currently Amended) The pharmaceutical composition of claim 2, wherein the unsaturated fatty acid with 18 carbon atoms that has a trihydroxy-monoene structure is 9,12,13-trihydroxy-10E-octadecenoic acid, of which structure is as follows:



wherein ~~R1~~ R_1 is selected from the group consisting of a hydroxyl group and a substituent comprising a linkage of 1 or 2 alkyl groups or aryl groups to 1 oxygen, sulfur, or nitrogen atom; and ~~R2~~ R_2, ~~R3~~ R_3, and ~~R4~~ R_4 are independently selected from the group consisting of hydrogen, alkyl group, and acyl group and may each be identical or different.

4. (Currently Amended) The pharmaceutical composition of claim 1, wherein the purified hydroxy unsaturated fatty acid is a hydroxy unsaturated fatty acid ~~prepared~~ purified from a medicinal plant.

5. (Withdrawn) A vaccine preparation comprising an antigen constituent and the pharmaceutical composition of claim 1 as a constituent.

6. (Withdrawn) The vaccine preparation of claim 5,wherein the pharmaceutical composition in the vaccine preparation is used in an oral inoculation independently of the antigen constituent.

7. (Withdrawn) The vaccine preparation of claim 6, wherein the antigen constituent in the vaccine preparation is used in an intranasal, subcutaneous, oral, or intramuscular inoculation or is inoculated through other mucosae.

8. (Withdrawn) The vaccine preparation of claim 5, wherein the antigen is derived from one or more pathogenic microorganisms selected from the group consisting of influenza virus, rotavirus, measles virus, rubella virus, mumps virus, AIDS virus, *Bordetella pertussis*, diphtheria bacillus, *Helicobacter pylori*, enterohaemorrhagic *Escherichia coli* (EHEC), *Chlamydia, Mycoplasma*, Malaria *Plasmodium*, coccidium, and schistosome.

9. (Withdrawn) A method for administering the vaccine preparation of claim 5, the method comprising orally administering the pharmaceutical composition in the vaccine preparation independently of the antigen constituent.

10. (Withdrawn) The method of claim 9, wherein the antigen constituent is inoculated intranasally, subcutaneously, orally, or intramuscularly, or through other mucosae.

11. (Withdrawn) The vaccine preparation of claim 5, wherein the pharmaceutical composition in the vaccine preparation is mixed with the antigen constituent.

12. (Withdrawn) A method of enhancing the immunological activity of a vaccine, wherein the method comprises administering the pharmaceutical composition of claim 1 and a vaccine antigen.

13. (Withdrawn) The method of claim 1, wherein the pharmaceutical composition is orally administered and the vaccine antigen is administered intranasally, subcutaneously, orally, or intramuscularly, or through other mucosae.

14. (Withdrawn) The method of claim 12, wherein the vaccine antigen is derived from one or more pathogenic microorganisms selected from the group consisting of influenza virus, rotavirus, measles virus, rubella virus, mumps virus, AIDS virus, *Bordetella pertussis*, diphtheria bacillus, *Helicobacter pylori*, enterohaemorrhagic *Escherichia coli* (EHEC), *Chlamydia, Mycoplasma*, Malaria *Plasmodium*, coccidium, and schistosome.

15. (Currently Amended) A pharmaceutical composition comprising a purified or synthesized hydroxy unsaturated fatty acid as an active ingredient and a pharmaceutically acceptable carrier, wherein the hydroxy unsaturated fatty acid is an unsaturated fatty acid with 18 carbon atoms and the unsaturated fatty acid may be substituted at its hydroxyl group or a carbonyl group of a carboxylate moiety, and wherein the pharmaceutical composition comprises an adjuvant activity, and wherein the purity of the hydroxy unsaturated fatty acid is 95% or higher.

16. (Currently Amended) A pharmaceutical composition comprising [[-]] a purified or synthesized hydroxy unsaturated fatty acid as an active ingredient and [[-]] a pharmaceutically acceptable carrier, wherein the hydroxy unsaturated fatty acid is an unsaturated fatty acid with 18 carbon atoms and the unsaturated fatty acid may be substituted at its hydroxyl group or a carbonyl group of a carboxylate moiety, and wherein the pharmaceutical composition has an activity of enhancing the immune response to an antigen, and wherein the purity of the hydroxy unsaturated fatty acid is 95% or higher.

17. (Canceled).